



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,432	09/04/2003	Hironori Okado	116710	5222
25944	7590	06/10/2005	EXAMINER	
OLIFF & BERRIDGE, PLC			A, MINH D	
P.O. BOX 19928			ART UNIT	
ALEXANDRIA, VA 22320			PAPER NUMBER	
			2821	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/654,432

Applicant(s)

OKADO, HIRONORI

Examiner

Minh D A

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13 and 16 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-13 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson (US 2003/0020668).

Regarding Claim 1, Peterson discloses an antenna, comprising:
a ground pattern; and a planar element that has a feed point (234) and a cut-out portion formed at an edge portion (22) being conductive and includes being opposite to the ground pattern (225) side of the planar element (215 and 210), and wherein said ground pattern (225) and said planar element (215, 210) are juxtaposed with

Art Unit: 2821

each other extending along counter directions respectively. See figures 4A-4B, col.1, lines [0014] –[0015] to col.4, lines [0037]-[0039].

Regarding claim 2, Peterson discloses wherein said planar element (215 and 210) is disposed so that said edge portion other than said cut-out portion of said planar element is opposite to said ground pattern. See figures 4A-4B.

Regarding claim 3, Peterson discloses an antenna as is formed without fully surrounding said edge element, said ground pattern (18) portion of said planar. See figures 1A-2B.

Regarding claim 4, Peterson discloses a cut out portion (32) has a rectangular shape. See figure 17A-17B, col.9, lines 26-46.

Regarding claim 5, Peterson discloses wherein said cut-out portion (220) is formed symmetrically with respect to a line passing through said feed point (234). See figures 4A-4B.

Regarding claim 8, Peterson discloses wherein at least one of said planar element and said ground pattern has a portion that causes to continuously vary a distance there-between. See figures 4A-4B.

Regarding claim 9, Peterson discloses wherein said planar element said edge portion is curved. See figures 4A-4B.

Regarding claim 10, Peterson discloses wherein said planar element formed on a dielectric substrate . See figures 4A-4B.

Regarding claim 11, Peterson discloses an antenna dielectric substrate , comprising: a layer formed dielectric material; and a layer containing a conductor having a cut-out portion formed from an edge portion nearest to a first side

Art Unit: 2821

surface of said antenna dielectric substrate toward a second side surface opposite to said first side surface. See figures 4A-4B, col.1, lines [0014] –[0015] to col.4, lines [0037]-[0039].

Regarding claim 12, Peterson discloses a dielectric substrate having the cut-out portion. See figures 4A-4B.

Regarding claim 13, Peterson discloses wherein said cut-out portion is formed symmetrically with respect to a line passing through a feed point of said conductor. See figures 4A-4B.

Regarding claim 16, Peterson discloses wherein an edge portion of said conductor (234), which is nearest to said second side surface, has a portion that continuously varies a distance with said second side surface. See figures 4A-4B.

Allowable Subject Matter

2. Claims 6-7 and 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach that, wherein said planar element (12) has such a shape that a bottom side thereof is adjacent to the ground pattern (18), lateral sides thereof is provided vertically or substantially vertically to said bottom side and said cut-out portion is provided in a top side thereof recited in dependent claims 6-7 and 14-15.

Conclusion

Art Unit: 2821

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grangeat et al (US 6,133,879) and McCorkle. (US 6,351,246) are cited to show an antenna apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (571) 272-1817. The examiner can normally be reached on M-F (5:30 –2:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (571) 272-1553.

Examiner

Minh A

Art unit 2821

10/26/04


WILSON LEE
PRIMARY EXAMINER